Historic, archived document

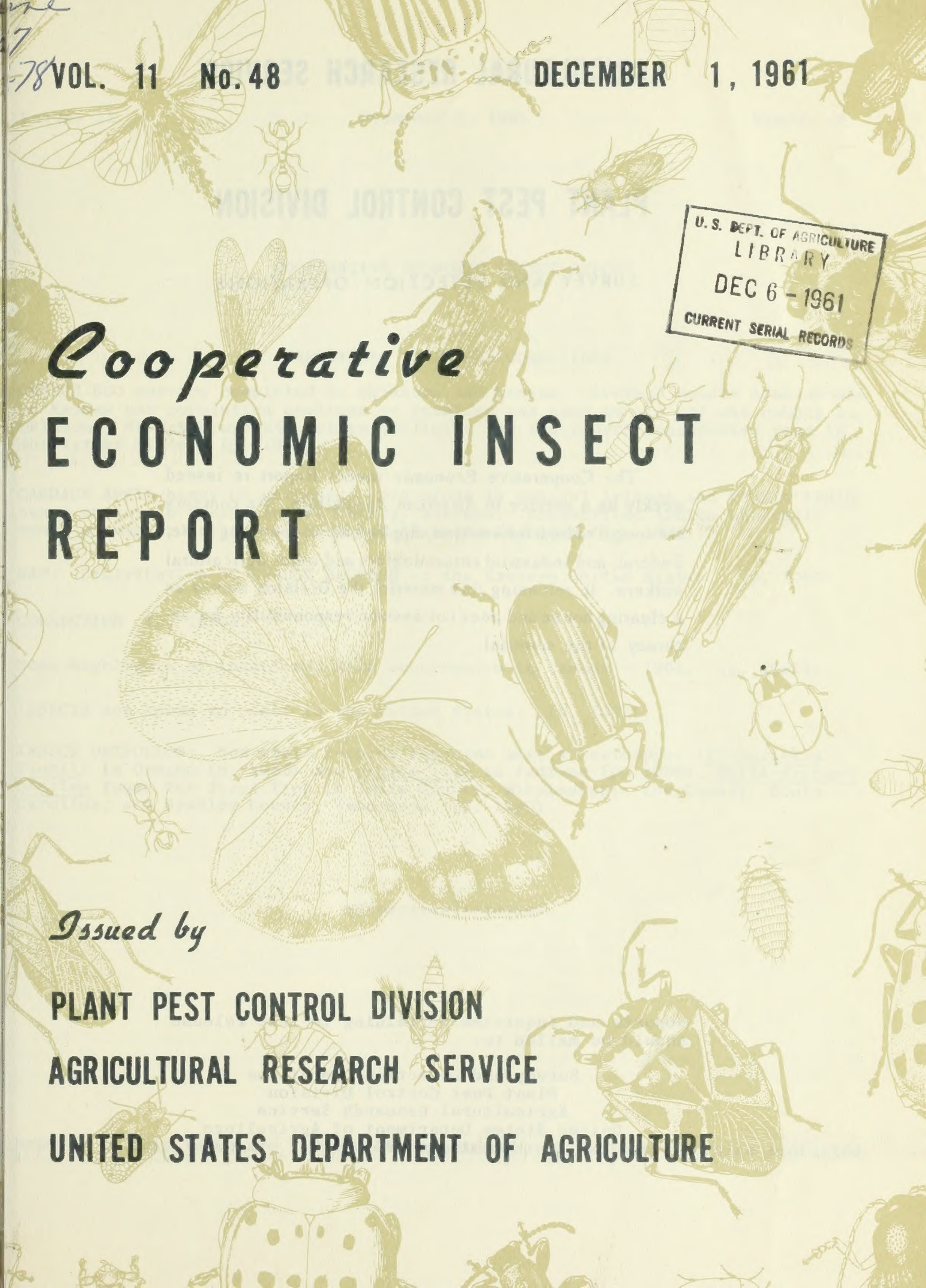
Do not assume content reflects current scientific knowledge, policies, or practices.

7
-78

VOL. 11 No. 48 DECEMBER 1, 1961

U. S. DEPT. OF AGRICULTURE
LIBRARY
DEC 6 - 1961
CURRENT SERIAL RECORDS

Cooperative
ECONOMIC INSECT REPORT



Issued by

PLANT PEST CONTROL DIVISION
AGRICULTURAL RESEARCH SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL DIVISION

SURVEY AND DETECTION OPERATIONS

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearing house and does not assume responsibility for accuracy of the material.

Reports and inquiries pertaining to this release should be mailed to:

Survey and Detection Operations
Plant Pest Control Division
Agricultural Research Service
United States Department of Agriculture
Washington 25, D. C.

Volume 11 December 1, 1961 Number 48

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

CHINCH BUG surveys completed in Oklahoma and Kansas. Average counts noneconomic in Kansas and population declined or remained the same in all but one county in Oklahoma, with the overall rating declining for the fourth consecutive year in the latter State. (p. 1085).

CABBAGE APHID heavy on untreated cole crops in central Arizona and TURNIP APHID heavy on turnip greens in Lee County, Alabama. Unspecified APHIDS unusually heavy on mustard greens in Piedmont of South Carolina. (p. 1086).

MAP: Distribution of SPRUCE BUDWORM in the Eastern United States. (p. 1088).

CORRECTION (p. 1090).

Some highlights of insect and mite occurrences in Canada - 1961. (p. 1091).

INSECTS not known to occur in the United States. (p. 1093).

INSECT DETECTION: New state records reported were a leafhopper (Fieberiella florii) in Oregon (p. 1085) and winter tick in Indiana (p. 1089). White-fringed beetles found for first time in Amite County, Mississippi; Lee County, South Carolina; and Bradley County, Tennessee. (p. 1090).

****

Reports in this issue are for week ending November 24 unless otherwise indicated.

WEATHER OF THE WEEK ENDING NOVEMBER 27

The past week's weather was generally stormy, with widespread precipitation that occurred as heavy snow in the Pacific Northwest and as mostly heavy rain in much of the eastern third of the Nation. The week was abnormally cold in the Pacific and south Atlantic Coastal States and unseasonably mild elsewhere.

The entire week was cool in the Pacific States, where average temperatures for the week were 9° below normal in northern Washington and the Sierra Nevada Mountains and generally 3° to 6° below elsewhere. Freezing occurred in northern and central portions of California. From the Rocky Mountain States to the Atlantic coast, the week was abnormally cold at the beginning, followed by rising temperatures the remainder of the period. In north-central areas, maximum temperatures rose into the 50's and 60's the latter part of the week. Detroit,Michigan, reported 58° on the 26th.

A storm off the north Atlantic coast on Monday and Tuesday produced the most general snowfall of the season to date in the Northeast. In New England, total snowfall for the storm ranged from 4 to 10 inches, except near 1 inch along the coast where the snow turned to rain, 1 to 4 inches in northwestern Vermont, and over 10 inches from east-central New Hampshire to coastal Maine. At Greenville, Maine, 25.0 inches of snow in 24 hours on the 21st set a new record for any month and greatly exceeded the previous November record of 16.0 inches in 1943. At Rockland, Maine, 4.24 inches of precipitation in 24 hours on the 20th and 21st set a new November record.

The storm that produced the most extensive precipitation, as well as the heaviest in many areas, moved from California at the beginning of the week to the Atlantic coast on Thursday. Heavy amounts fell from the Mississippi Valley to the Appalachians on Tuesday, Wednesday and Thursday, and east of the Appalachians on Thursday, Friday and Saturday. Total falls during this storm generally exceeded an inch from the central and lower Mississippi Valley to the Atlantic coast. These heavy rains further replenished soil moisture in the lower Ohio Valley and Southeast. Amounts ranged from 1 to 2 inches in Georgia and North Carolina and generally exceeded an inch in South Carolina. More rain is still needed in parts of Georgia and the Carolinas to fully replenish subsoil moisture. In Florida, totals generally ranged from about 0.30 to 0.75 inch, enough to only slightly improve soil moisture.

Storms at the beginning and end of the week produced moderate to heavy precipitation over most of California and light to moderate rain and snow in the central and lower Rockies. In the Pacific Northwest, precipitation occurred almost daily. Heavy snows fell in the mountains of Oregon and Washington, and even at lower elevations in Washington and western Oregon. In Washington, heaviest snowfall occurred on the eastern slopes of the Cascades where Chelan measured 13 inches and Leavenworth 24. At the end of the week, 1 to 2 inches of snow covered the ground in the central basin of Washington, 3 to 8 inches in the eastern portion of the State, and 6 to 10 inches in the northern valleys.

In Oregon, heavy snow from Eugene to Medford and in the Klamath Falls area closed many highways, damaged power and communication lines, and isolated some communities. Flooding also occurred along Oregon's coastal streams where total precipitation for the week ranged up to 9.70 inches. (Summary supplied by U.S. Weather Bureau).

CEREAL AND FORAGE INSECTS

GREENBUG (Toxoptera graminum) - OKLAHOMA - Light, 15 per linear foot, in wheat in Jefferson County. (Okla. Coop. Sur.). ARKANSAS - None found in small grains in Washington County. (Ark. Ins. Sur.).

CORN LEAF APHID (Rhopalosiphum maidis) - OKLAHOMA - Light, 8 per linear foot, on wheat in south central area. (Okla. Coop. Sur.).

APPLE GRAIN APHID (Rhopalosiphum fitchii) - OKLAHOMA - Light, 5 per linear foot, on wheat in Jefferson County. (Okla. Coop. Sur.).

ENGLISH GRAIN APHID (Macrosiphum granarium) - ARKANSAS - Numbers low, 1-2 per linear foot, in northwest area. (Ark. Ins. Sur.).

CHINCH BUG (Blissus leucopterus) - KANSAS - Annual survey conducted in 58 counties in northeast, east central, southeast, north central and south central districts during early November; 2 stops made in each county. Average counts were non-economic (0-250 bugs per square foot of bunch grass) in all counties, except in Montgomery County (southeast) where counts were light (500 per square foot). (Bell, Gates, Hohnholt, Peters). OKLAHOMA - Results of 1961 survey indicate populations declined or remained the same in all but one county surveyed. Okfuskee County showed increase to moderate (500-1,000 bugs per square foot of bunch grass) which was highest county rating included in survey. Lincoln, Rogers and Tulsa Counties were light (250-500 per square foot), with remaining counties non-economic (0-250 per square foot). This is fourth consecutive year that overall ratings have declined. (Okla. Coop. Sur.).

GRASSHOPPERS - MINNESOTA - Limited checks on egg development made during period November 13-20, with only eggs of Melanoplus bivittatus found; majority in coagulated stage, with few in early eye-spot stage. On sheltered ditch bank, few segmented eggs observed. Fall weather has been warmer than usual, allowing some egg development before winter. (Minn. Ins. Rpt., Nov. 20).

SPOTTED ALFALFA APHID (Therioaphis maculata) - SOUTH DAKOTA - Egg-laying forms found for first time in State November 20 in alfalfa near Missouri River in Charles Mix and Gregory Counties. (Walstrom). ARKANSAS - Counts very low in Washington County; only occasional specimen taken in sweeping several fields. (Ark. Ins. Sur.). ARIZONA - Infestations generally low in alfalfa, statewide.(Ariz.Coop.Sur.).

PEA APHID (Macrosiphum pisi) - ARKANSAS - Averaged 30-40 per 10 sweeps of 15-inch net in Washington County vetch. (Ark. Ins. Sur.).

TARNISHED PLANT BUG (Lygus lineolaris) - ARKANSAS - Continues active in legumes in northwest; counts 1-4 per 10 sweeps of 15-inch net. Occasional nymph taken in sweep net on November 20. (Ark. Ins. Sur.).

A LEAFHOPPER (Fieberiella florii) - OREGON - Collected on quince in Corvallis, Benton County, during August. This species is known to transmit both western X and aster yellows viruses. This collection west of the Cascade Mountains is a new record for the State. (Swenson, Nov. 18).

SOYBEAN CYST NEMATODE (Heterodera glycines) - TENNESSEE - Infestation found in second field in Carroll County, approximately one-half mile from original find. (PPC, So. Reg., Oct. Rpt.). ILLINOIS - Second infested property in Pulaski County confirmed during October. Property immediately adjacent to first find in county. (PPC, Cent. Reg.).

A CRAMBID (Chilo loftini) - ARIZONA - Specimens collected from infestations of borers heavily damaging pampasgrass in central area during fall months determined as this species. (Ariz. Coop. Sur.).

A WHITE GRUB (Cyclocephala sp.) - MARYLAND - Full-grown larvae infesting lawn at Towson, Baltimore County. (U. Md., Ent. Dept.).

FRUIT INSECTS

Coccids in California - OLIVE SCALE (Parlatoria oleae) and SAN JOSE SCALE (Aspidiotus perniciosus) medium on some pear nursery stock in Oroville, Butte County. FIG SCALE (Lepidosaphes ficus) heavy on fig trees in Fresno, Fresno County. (Cal. Coop. Rpt.).

BLACK CITRUS APHID (Toxoptera aurantii) - CALIFORNIA - Adult population light on citrus in Colusa and medium in Williams, Colusa County. Infestations associated with Argentine ant (Iridomyrmex humilis) populations. (Cal. Coop. Rpt.).

CITRUS BLACKFLY (Aleurocanthus woglumi) - MEXICO - Biological Control Zone: Buildups, heavy in some instances, reported in municipios Bacum, Cajeme and Ciudad Obregon, Sonora, and Municipio Tlaquepaque, Jalisco. Parasites from 3 properties in each state available for liberation; also available from other states. In Campeche, parasite captures can now be made in 5 properties. In State of Tamaulipas, in municipios Guemez, Padilla, Vitoria and Llera, 44,199 trees inspected on 252 properties, with 6,516 trees infested on 165 properties. Scattered trees in several groves heavily infested. Some adults and egg spirals noted, but pupae prevalent and with high percent of parasitism. Adult parasites noted; will probably be abundant shortly for local control and for collection and distribution to other locations. Chemical Control Zone: On October 7, another extensive infestation found in Municipio Montemorelos, Nuevo Leon, with 100 trees heavily infested; infestation less on several thousand other trees. Chemical control begun promptly. In states of Nuevo Leon, Sonora and Baja California, 121,778 citrus trees inspected on 962 properties; 14,635 trees in 38 properties infested, all in Nuevo Leon. Insecticide treatments applied to 37,491 trees on 60 properties in vicinities of Allende, Montemorelos and Linares, Nuevo Leon. (PPC, Mex. Reg.).

MEXICAN FRUIT FLY (Anastrepha ludens) - MEXICO - An adult male, tentatively determined as this species, trapped in city of Tijuana, Baja California, October 31. Eradication spray program to be resumed November 1, and 3 additional treatments applied at 21-day intervals, if no additional specimens trapped. In Tijuana, Tecate, Ensenada and Mexicali, Baja California, and in San Luis, Sonora, 7,273 trap inspections made of 1,861 traps on 920 properties. (PPC, Mex. Reg.).

MEDITERRANEAN FRUIT FLY (Ceratitis capitata) - MEXICO - Trapping resumed at Comalapa and Venustiano Carranza in vicinity of Comitan, Chiapas, where survey temporarily suspended during rainy season. At end of October, 1,485 traps were in service in State of Chiapas; total of 2,811 trap inspections made, with negative results. (PPC, Mex. Reg., Oct. Rpt.).

TRUCK CROP INSECTS

TOMATO RUSSET MITE (Aculus lycopersici) - UTAH - Found in several tomato fields in Ogden area, Weber County, and at Tremonton and Deweyville, Box Elder County. (Knowlton, Duncan).

CABBAGE APHID (Brevicoryne brassicae) - ARIZONA - Infestations heavy on untreated cole crops in central part of State. (Ariz. Coop. Sur.). ALABAMA - Large numbers observed on collards in Lee County. (Guyton).

TURNIP APHID (Rhopalosiphum pseudobrassicae) - ALABAMA - Heavy on turnip greens in Lee County. (Guyton).

APHIDS - SOUTH CAROLINA - Unusually heavy on mustard greens in Piedmont area. Also heavy on turnip greens at a location near Westminster, Oconee County. (Nettles et al.).

YELLOW-MARGINED LEAF BEETLE (Microtheca ochroloma) - ALABAMA - Light infestation on tender turnip greens in Lee County. (Guyton).

A NOCTUID (Proxenus mindara) - CALIFORNIA - Infestation medium in portion of a planting of sugar beets in Tracy, San Joaquin County. (Cal. Coop. Rpt.).

ELONGATE FLEA BEETLE (Systena elongata) - SOUTH CAROLINA - Larvae heavily damaged sweetpotatoes in untreated plots near insectary at Clemson, Pickens County. (Nettles et al.).

A SAWFLY (Sphacophilus cellularis) - SOUTH CAROLINA - Collected on sweetpotato at Walterboro, Colleton County, on October 2, by L. W. Alford. Det. by B. D. Burks. (Nettles et al.).

COTTON INSECTS

PINK BOLLWORM (Pectinophora gossypiella) - OKLAHOMA - Lint cleaner inspections in Muskogee, Payne and Wagoner Counties positive; 12 larvae recovered from 63 bushels of gin trash in Wagoner County. Inspections negative in Beckham County. (Okla. Coop. Sur.). MISSISSIPPI - Three larvae found in cotton bolls intercepted at Vicksburg road station. This is first interception at this station in past 2 years. (PPC, So. Reg., Oct. Rpt.).

FOREST, ORNAMENTAL AND SHADE TREE INSECTS

BARK BEETLES - CALIFORNIA - Dendroctonus brevicomis and Ips spp. causing severe damage in areas where direct control measures not applied following forest fires and logging in Whitehall-Kyburz area. Fades few in ponderosa pine in areas where control applied. D. jeffreyi caused some killing of Jeffrey pines in Alder Ridge area. Salvage logging of dead and fading trees accomplished in several areas in district, with additional sanitation salvage scheduled. In Jim Quinn Springs area, 500 thousand board feet of red and white fir salvaged-logged in September and October. (S. Parker, J. Bates).

NANTUCKET PINE TIP MOTH (Rhyacionia frustrana) - MARYLAND - Populations of one per plant noted on dwarf red pines at Guilford, Howard County. (U. Md., Ent. Dept.).

PINE NEEDLE MINER (Exoteleia pinifoliella) - DELAWARE - Larvae common in needles of Virginia pine in Sussex County. (Burbutis, Mason).

A TWIG MOTH (Dioryctria sp.) - OREGON - Found injuring Scotch pines in a Portland nursery, Multnomah County, November 15. Brown larvae, approximately one-half inch in length, recovered from irregular galleries beneath bark. (Larson).

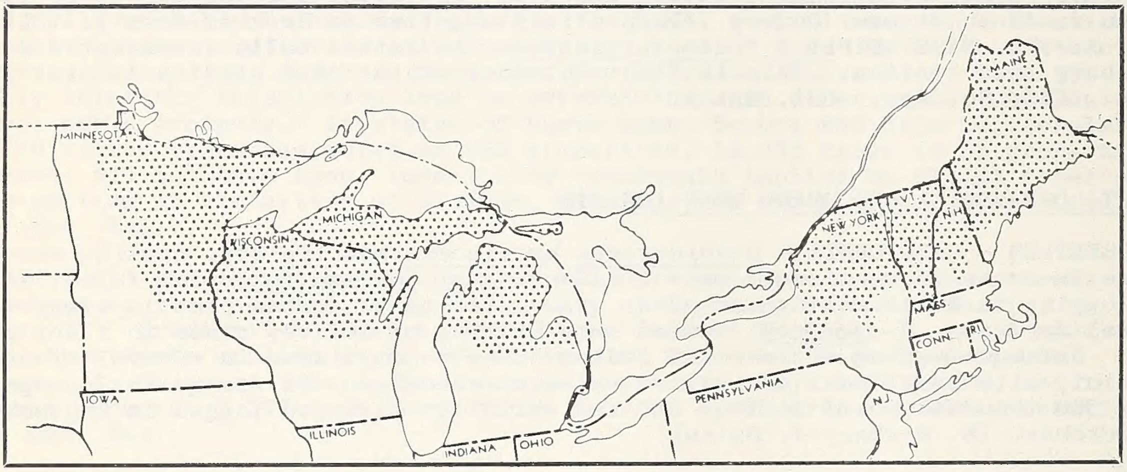
A FLATHEADED BORER (Chrysobothris sp.) - CALIFORNIA - Infestation heavy on trunks of cypress in El Cajon, San Diego County. (Cal. Coop. Rpt.).

A COTTONWOOD LEAF APHID (Neothomasia populicola) - CALIFORNIA - Medium to heavy on poplar tree nursery stock at several locations in northern part of State. (Cal. Coop. Rpt.).

OBSCURE SCALE (Chrysomphalus obscurus) - MARYLAND - Infesting several young oaks at Williamsport, Washington County. (U. Md., Ent. Dept.).

MOURNING-CLOAK BUTTERFLY (Nymphalis antiopa) - CALIFORNIA - Medium on Chinese elm in Arlington, Riverside County. (Cal. Coop. Rpt.).

DISTRIBUTION OF SPRUCE BUDWORM (Choristoneura fumiferana (Clem.)) IN THE EASTERN UNITED STATES



From Forest Pest Leaflet 58
Forest Service, USDA
August 1961

LINDEN LOOPER (Erannis tiliaria) - DELAWARE - Adult male flights heavy in Newark area, New Castle County. (Burbutis, Mason).

AN ARBORVITAE APHID (Cinara tujafilina) - OKLAHOMA - Medium populations noted on arborvitae in Marshall County. (Okla. Coop. Sur.).

SPOTTED CUCUMBER BEETLE (Diabrotica undecimpunctata howardi) - MARYLAND - Adults damaging chrysanthemum flowers locally in Calvert County. (U. Md., Ent. Dept.).

A BAMBOO BORER (Dinoderus brevis) - CALIFORNIA - Infestation medium in bamboo in Pinole, Contra Costa County. (Cal. Coop. Rpt.).

A SPIDER MITE (Schizotetranychus celarius) - CALIFORNIA - Heavy on bamboo in nursery at Chula Vista, San Diego County. (Cal. Coop. Rpt.).

INSECTS AFFECTING MAN AND ANIMALS

HORN FLY (Haematobia irritans) - OKLAHOMA - Light, 5-15 per animal, on cattle in Pushmataha County; less than 10 per animal observed in Stillwater area, Payne County. (Okla. Coop. Sur.).

STABLE FLY (Stomoxys calcitrans) - OKLAHOMA - Populations of less than one per animal noted on cattle in Stillwater area, Payne County. (Okla. Coop. Sur.).

SCREW-WORM (Callitroga hominivorax) - ALABAMA - No new cases reported during period November 10-22. (Buttram).

HOUSE FLY (Musca domestica) - OKLAHOMA - Continues annoying around barns and in heated shelters. (Okla. Coop. Sur.).

A MOSQUITO (Culex salinarius) - DELAWARE - Recent adult flights numerous in eastern Kent County; caused considerable annoyance to local residents. (Lake).

CATTLE LICE - UTAH - A problem in many counties; controls recently applied to 1,200 head in San Juan County, 1,500 in Wasatch County and 1,200 in Duchesne County. (Knowlton). NEBRASKA - Infestations of undetermined species very light on some cattle herds entering an eastern area livestock sales barn. (Bergman).

WINTER TICK (Dermacentor albipictus) - INDIANA - Specimens collected from feeder calves in a lot near Peru, Miami County, are first collected in State. Calves were shipped in from out of State. Determination verified by G. M. Kohls. (Matthew, Dobson). OKLAHOMA - Light to heavy infestations (6-24 per head) noted on cows checked in Pushmataha County. Counts of 200 noted on horses. (Okla. Coop. Sur.).

STORED-PRODUCT INSECTS

INDIAN-MEAL MOTH (Plodia interpunctella) - SOUTH DAKOTA - Larvae infesting stored grain in Onida, Sully County, and in Yankton, Yankton County. (Mast).

SAW-TOOTHED GRAIN BEETLE (Oryzaephilus surinamensis) - NEBRASKA - Infestation heavy in sacked commercial feed in storage in Lancaster County. (Bergman).

Stored-product Pests in Delaware - Lasioderma serricorne, Oryzaephilus surinamensis and Tribolium confusum troublesome in stored foods in homes in Newark area, New Castle County. Reports considerably more numerous than at same time in 1960. Rather heavy infestation of Sitotroga cerealella reported in popcorn in Newark. (Burbutis, Mason).

BENEFICIAL INSECTS

A PARASITIC BRACONID (Aphidius smithii) - ARIZONA - Specimens of this parasite of pea aphid (Macrosiphum pisi) released November 8 in Tucson area, Pima County. (Ariz. Coop. Sur.).

PARASITES AND PREDATORS - ARKANSAS - Occasional specimen of Hippodamia convergens taken on vetch in northwest; hymenopterous parasites active in small grains and legumes. Occasional specimen of Chrysopa plorabunda taken in alfalfa in northwest; 1-2 Nabis spp. per 10 sweeps taken in vetch in same area. (Ark. Ins. Sur.).

MISCELLANEOUS INSECTS

WHITE-FRINGED BEETLES (Graphognathus spp.) - During October, initial finds made in Amite County, MISSISSIPPI, Lee County, SOUTH CAROLINA, and Bradley County, TENNESSEE. New infestations also found in Adams County, MISSISSIPPI, and Hamilton County, TENNESSEE, where no specimens have been collected for several years. (PPC, So. Reg.).

CARPET BEETLE (Anthrenus scrophulariae) - ALABAMA - Heavy population caused extensive damage to woolen goods in display window of a department store in Fayette County. (Buttram).

ELM LEAF BEETLE (Galerucella xanthomelaena) - OKLAHOMA - Adults continue a nuisance in homes in Stillwater area, Payne County. (Okla. Coop. Sur.).

POTATO TUBERWORM (Gnorimoschema operculella) - DELAWARE - Infestation in home in Sussex County probably originated from stored potatoes. (Green).

BOXELDER BUG (Leptocoris trivittatus) - UTAH - Annoying in a number of homes in Paradise-Avon area, Cache County. (Knowlton).

FALSE CHINCH BUG (Nysius ericae) - OREGON - Adults and nymphs invading homes and public buildings in Crook County. (Every).

BED BUG (Cimex lectularius) - SOUTH DAKOTA - Infested a dwelling in Brookings, Brookings County. (Spawn, Nov. 17).

IMPORTED FIRE ANT (Solenopsis saevissima richteri) - FLORIDA - Collected in Township 32, Hillsborough County, on November 6 and 7, at 2 separate locations. (Fla. Coop. Sur.).

CLOVER MITE (Bryobia praetiosa) - SOUTH DAKOTA - Reported as pestiferous around homes in Murdo, Jones County. (Hanten). MARYLAND - Infesting lawn and house in Silver Spring, Montgomery County. (U. Md., Ent. Dept.).

MILLIPEDS - OKLAHOMA - Continue annoying around homes in Stillwater area, Payne County. (Okla. Coop. Sur.).

CORRECTION

CEIR 11(41):948 - GRAPE LEAF SKELETONIZER (Harrisina americana) - VIRGINIA, should read: A LEAF SKELETONIZER (Acoloithus falsarius) - VIRGINIA. Det. by H. W. Capps. (Tarpley).

Some Highlights of Insect and Mite Occurrences in Canada

1961

Prepared by C. Graham MacNay

In British Columbia, GRASSHOPPER populations continued to be relatively small, although increases were evident in some areas. In much of the agricultural area of the Prairie Provinces, a continuation of the impressive increase of recent years was recorded, and damage was aggravated by extremely dry, hot weather. In Alberta, the area infested (19,000 square miles) was about 80 percent greater than in 1960, the most severe infestations occurring in the southwestern part of the Province. In the prairie area of Saskatchewan, the outbreak in field crops, pastures and gardens was the most severe in 20 years; crop damage was mainly marginal but extended throughout many fields. In Manitoba, the total area of infestation (9,000 square miles) was more than double that of 1960, the area of severe infestation being more than 3 times as great, and the area of moderate infestation more than 4 times as great as in 1960.

In British Columbia, RED-BACKED CUTWORM (Euxoa ochrogaster) was at a low ebb and GLASSY CUTWORM (Crymodes devastator) again caused some damage to pasture in the Dawson Creek area. In Alberta, ARMY CUTWORM (Chorizagrotis auxiliaris) was injurious to winter wheat for the second successive year in the Bow Island, Milk River, Warner and Vulcan districts, and the infestation extended into southwestern Saskatchewan. RED-BACKED CUTWORM severely damaged garden and irrigated crops in southern Alberta and attacked grain in the central part of the Province, but crop losses were much lighter than in 1960. There was a marked increase in infestation and damage by PALE WESTERN CUTWORM (Agrotis orthogonia) in the southern part of the Province and a further increase is expected in 1962. In southern and western areas of Saskatchewan, this cutworm severely damaged thousands of acres of cereals and flax in the most severe and widespread infestation in many years. In Manitoba, CUTWORMS continued to be very injurious in gardens and RED-BACKED CUTWORM was numerous in cereal and sugar beet crops. In Ontario, CUTWORM damage increased, especially in tobacco-growing areas. In the Saguenay-Lac St. Jean area of Quebec, CUTWORMS were numerous in truck gardens. In New Brunswick, ARMYWORM (Pseudaletia unipuncta) was injurious to hay in widely-separated areas from Fredericton southward and much cutworm damage occurred in gardens. In Nova Scotia, a moderate infestation of BRONZED CUTWORM (Nephelodes emmedonia) was present in grassland at Cow Bay.

In southwestern Ontario, WIREWORMS were more injurious than during the previous 5 years, damaging tobacco, corn, potatoes and grain, and Oestodes tenuicollis occurred in oats in Oxford County. In Kent County, Nova Scotia, counts in sod revealed 12 or more wireworms per square foot. In Quebec, WHITE GRUBS damaged grassland, lawns and gardens in the Eastern Townships. In Ontario, SLUGS were very injurious in both field and garden.

In Saskatchewan, FALSE CHINCH BUG (Nysius ericae) damaged crested wheatgrass, wheat and flax at Vanscoy, Dunblane, Milden and Saskatoon, the first record of severe damage by this insect in the Province. In the Milk River Valley, Alberta, where ALFALFA WEEVIL (Hypera postica) was first found, the number of larvae per net sweep averaged 483, compared with 263 in 1960, and in the Lethbridge area, damage was noticeable for the first time. At Taber, a SUGAR-BEET NEMATODE appeared for the first time in Western Canada. In Manitoba, a new species of SPIDER MITE (Tetranychus n. sp.) heavily infested barley in the south central area of the Province, and light infestations occurred in rye, corn and wheat near Winnipeg. Damage resembled that of net blotch. Large flights of BEET WEBWORM (Loxostege sticticalis) occurred late in June. FLEA BEETLES were very injurious to seedling rape. In Ontario, ROOT MAGGOT infestations in tobacco were severe for the fourth consecutive year. *Hylemya liturata* was the principal species, indicating a change in the species complex. Early turnips were damaged by CABBAGE MAGGOT (*H. brassicae*). In corn-growing areas, NORTHERN CORN ROOTWORM (*Diabrotica longicornis*) continued to increase markedly. In Prince Edward Island, BARLEY JOINTWORM (*Harmolita hordei*) was more widespread and numerous than in 1960.

In British Columbia, a pest resembling corn earworm on corn, insecticide-resistant strains of CARROT RUST FLY (*Psila rosae*) and CABBAGE MAGGOT, and increased numbers of GARDEN SYMPHYLAN (*Scutigerella immaculata*) were injurious. In Saskatchewan, FLEA BEETLES on crucifers and COLORADO POTATO BEETLE (*Leptinotarsa decemlineata*) were unusually numerous. In Manitoba, SIX-SPOTTED LEAFHOPPER (*Macrosteles fascifrons*) caused much "yellows" in lettuce, and resistant strains of ONION MAGGOT (*Hylemya antiqua*) were injurious in market gardens. In Ontario, SLUGS headed the list of pests. An outbreak of *H. liturata* severely damaged seeds and tubers in Norfolk County; resistant ONION MAGGOTS were injurious; peppers were severely attacked by PEPPER MAGGOT (*Zonosemata electa*) and EUROPEAN CORN BORER (*Ostrinia nubilalis*), but the latter insect was generally less numerous on corn. In Quebec, CABBAGE MAGGOT in Montreal market gardens, SPINACH LEAF MINER (*Pegomya hyoscyami*) in the St. Hyacinthe and St. Hilaire areas, and ASPARAGUS BEETLES (*Crioceris* spp.) generally, were major pests. At Lincoln, New Brunswick, APHID populations on potatoes were the largest on record. In Nova Scotia, there was an upsurge of MELON APHID (*Aphis gossypii*) on cucurbits and of SPINACH LEAF MINER on Chenopodiaceae, and GREENHOUSE SLUG (*Milax gagates*) was recorded for the first time at Amherst. In Prince Edward Island, COLORADO POTATO BEETLE, FLEA BEETLES and especially TARNISHED PLANT BUG (*Lygus lineolaris*) were very numerous on potatoes; and a WEEVIL (*Trachyphloeus bifoveolatus*) damaged many vegetable crops. In western Newfoundland, CABBAGE MAGGOT was a major pest of crucifers.

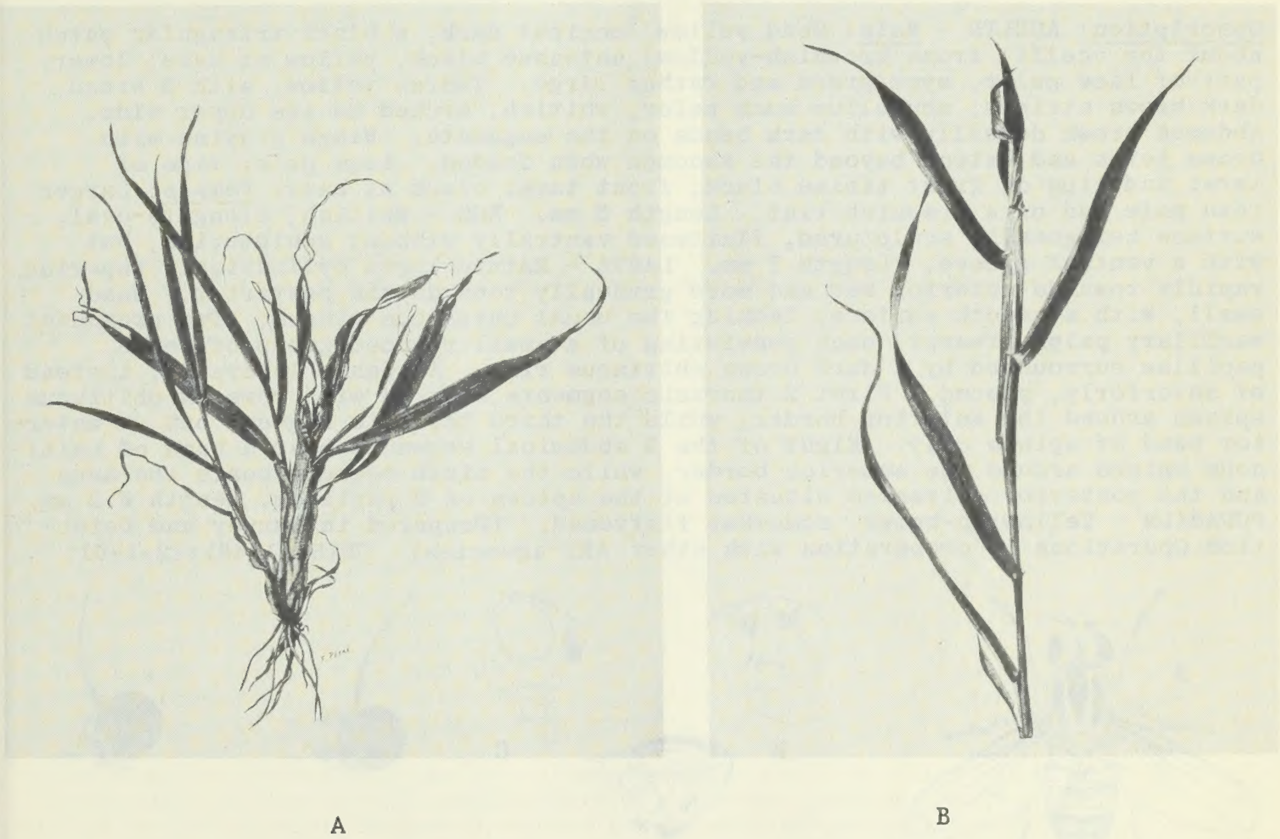
Important occurrences on fruit included: At Saanichton, British Columbia, MEADOW SPITTLEBUG (*Philaenus spumarius*) on strawberry and PEAR LEAF BLISTER MITE (*Eriophyes pyri*); at Vancouver, the first report of damage by a WEEVIL (*Brachyrhinus singularis*); in the Okanagan Valley, GRAPE PHYLLOXERA (*Phylloxera vitifoliae*) was new, CODLING MOTH (*Carpocapsa pomonella*) was unusually numerous, *Tetranychus mcdanieli* and RUST MITES on apple, pear and cherry, and LEAFHOOPERS on many hosts. In Ontario, ORIENTAL FRUIT MOTH (*Grapholitha molesta*) caused no economic losses, partly because of very heavy parasitism; EUROPEAN RED MITE (*Panonychus ulmi*) was very numerous on peach, plum and apple; EUROPEAN FRUIT LECANIUM (*Lecanium corni*) declined markedly as a pest of peach; CURRANT FRUIT FLY (*Epochra canadensis*) spread southward and EASTERN TENT CATERPILLAR (*Malacosoma americanum*) increased in eastern Ontario. In southern Quebec, EUROPEAN RED MITE, APPLE MAGGOT (*Rhagoletis pomonella*), FRUIT-TREE LEAF ROLLER (*Archips argyrospilus*) and EASTERN TENT CATERPILLAR increased markedly and CODLING MOTH decreased. In Nova Scotia, FALL CANKERWORM (*Alsophila pometaria*) and WINTER MOTH (*Operophtera brumata*) were numerous generally, and EUROPEAN RED MITE in some orchards. In Prince Edward Island, a TENTIFORM LEAF MINER was numerous.

Among miscellaneous pests, MASKED HUNTER (*Reduvius personatus*) appeared as a predator of stored-product insects in coastal and interior British Columbia, ROCKY MOUNTAIN WOOD TICK (*Dermacentor andersoni*) was unusually numerous, CLOVER MITE (*Bryobia praetiosa*) was a major pest at Kamloops, British Columbia, and Edmonton, Alberta; AMERICAN DOG TICK (*D. variabilis*) was abundant in southern Manitoba; and an outbreak of LARDER BEETLE (*Dermestes lardarius*) occurred in packaged fish meal in several processing plants in Newfoundland.

INSECTS NOT KNOWN TO OCCUR IN THE UNITED STATES

GOUT FLY (*Chlorops pumilionis* (Bjerkander))

Economic Importance: This chloropid fly is one of the most serious pests of winter and spring wheat, barley and rye in Europe. When climatic conditions are favorable, destructive outbreaks may occur. Activity of the pest is greatly reduced by cold, windy or rainy weather. The symptoms of infestation differ according to the time of year. The second-generation or winter-brood larva stunts the attacked shoot and causes an increase in the breadth of the leaves which appear unusually green. There appears to be no stem, while the central leaves are spirally curled. The first-generation or summer-brood larva causes a characteristic swelling of the stem of two or three internodes ending in the swollen head imprisoned in its sheathing leaves. It is from this latter symptom that the name gout fly is derived. Infested plants cease growth almost immediately. The reduction in grain yield has been over 50 percent in many instances and sometimes total loss of the crop has resulted from infestations of the pest.



Damage to Cereal Crop Plants by Larvae of *Chlorops pumilionis* (Bjerkander)

A - Typical Injury by Second Generation (Winter Brood)

B - Typical Injury by First Generation (Summer Brood)

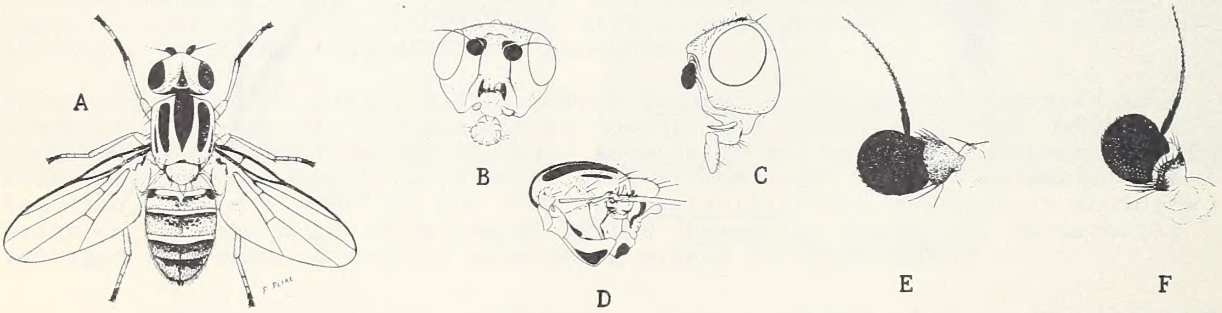
(Chloropidae, Diptera) No. 139 of Series

Hosts: Wheat, barley and rye are the principal cultivated hosts and quackgrass (*Agropyron repens*) the most important and probably the only wild host plant.

Distribution: Recorded throughout all of Europe and into Siberia in the USSR. The pest is also believed to be present in the Far East.

Life History and Habits: Two generations are reported throughout most of the area of the insect's distribution; a summer and a winter brood. In the British Isles, adults emerge about the end of May and deposit eggs singly, usually on the upper side of the leaves of host plants. Normally only one egg is laid on each shoot. Eggs hatch in about 8 days. The young larva enters the center of the shoot and then feeds its way down one side of the developing head and on as far as the first internode, leaving a characteristic groove. The larva passes through 2 molts, after which it turns around with its head pointed upward and ascends a short distance before pupation. Second-brood adults emerge about 36 days later in August. Oviposition by this brood usually takes place on quackgrass, but occasionally on winter wheat or barley and on volunteer wheat and barley. Larvae overwinter head downwards in shoots of host plants and pupate after reversing their position about late February or early March.

Description: ADULTS - Male: Head yellow, occiput dark, a black triangular patch about the ocelli; frons brownish-yellow; antennae black, yellow at base; lower part of face paler, eyes green and rather large. Thorax yellow, with 3 broad, dark brown stripes; scutellum much paler, whitish, arched on its upper side. Abdomen brown dorsally, with dark bands on the segments. Wings grayish with brown veins and extend beyond the abdomen when folded. Legs pale; tips of tarsi and tips of front tibiae black; front tarsi black at base. Female: Larger than male and of a greenish tint. Length 5 mm. EGG - Whitish, elongate-oval, surface hexagonally sculptured, flattened ventrally without sculpturing, but with a ventral groove. Length 1 mm. LARVA - Mature larva cylindrical, tapering rapidly towards anterior end and more gradually towards the posterior. Head small, with a smooth surface, lacking the usual chitinous ridges. Two prominent maxillary palps present, each consisting of a small rounded group of sense papillae surrounded by a dark brown chitinous ring. Antennae laterally, instead of anteriorly, placed. First 2 thoracic segments covered with rows of chitinous spines around the anterior border, while the third thoracic segment has an anterior band of spines only. Eight of the 9 abdominal segments bear a band of chitinous spines around the anterior border, while the ninth segment bears the anus and the posterior spiracles situated at the apices of 2 papillae. Length 6.3 mm. PUPARIUM - Yellowish-brown, somewhat flattened. (Prepared in Survey and Detection Operations in cooperation with other ARS agencies). CEIR 11(48):12-1-61.



Illustrations of *Chlorops pumilionis* (Bjerkander) Adult: A - Dorsal view of insect. B - Head, frontal view. C - Head, lateral view. D - Thorax, lateral view. E & F - Antenna, two views.

Major references: 1. Smith, K. M. 1948. A Textbook of Agricultural Entomology. 289 pp., Cambridge. 2. Balachowsky, A. and Mesnil, L. 1935. Les Insectes Nuisibles aux Plantes Cultivees. Vol. 1, 1137 pp., Paris. (Illus.).

UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON 25, D. C.

Official Business

POSTAGE AND FEES PAID